

Attorney Docket No. P70974US0
Application No. 10/559,832

Amendments to the claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims:

Claims 1-11 (canceled).

Claim 12 (new): A process for modifying an unmodified clay, the process consisting of the step of

- intimately mixing, in the presence of supercritical carbon dioxide (CO₂) and in the absence of polar solvents, a montmorillonite type clay with an organomodifier insoluble in the supercritical CO₂ and selected from the group consisting of quaternary ammonium salts, sulphonium salts, phosphonium salts, siliconated ammonium compounds, highly fluorinated ammonium compounds, precursors of said salts, and mixtures of at least two of said compounds.

Claim 13 (new): The process according to claim 12, wherein the quaternary ammonium salt is an alkylammonium salt.

Attorney Docket No. P70974US0
Application No. 10/559,832

Claim 14 (new): The process according to claim 13, wherein the alkylammonium salt is selected from the group comprising tetraethylammonium chloride, tetrabutylammonium hydrogen sulphate, didodecyldimethylammonium bromide, and mixtures thereof.

Claim 15 (new): The process according to claim 12, wherein the siliconated ammonium compound is a modified poly(dimethylsiloxane).

Claim 16 (new): The process according to claim 12, wherein the highly fluorinated ammonium compound is tetrahydroperfluoroctyltriethylammonium iodide.

Claim 17 (new): The process claim 12, wherein the quaternary ammonium compound precursors are an amine and an alkyl halide.

Claim 18 (new): The process according to claim 12, wherein the supercritical CO₂ is at a pressure of 50 to 300 bars and at a temperature of 40°C to 50°C.

Claim 19 (new): A biodegradable polyester foam prepared by the process according to claim 12 and having a homogeneous, substantially regular, fine and closed cellular structure.